

FIG.1

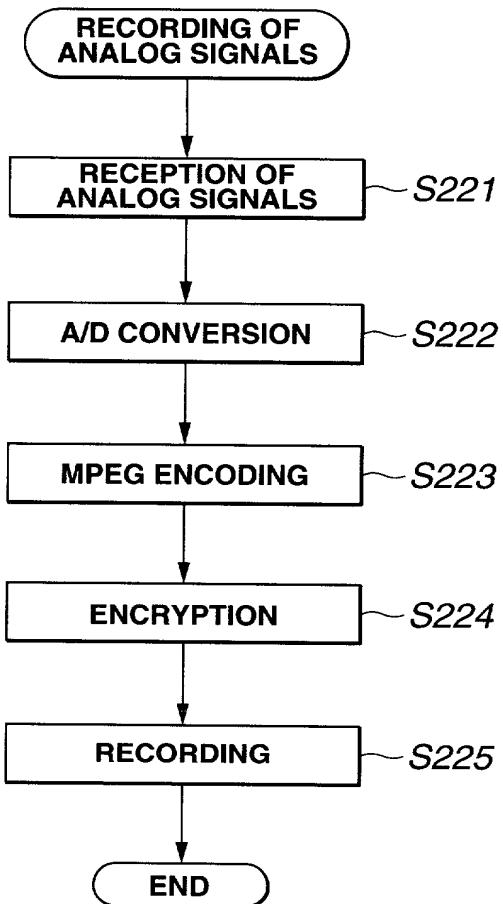
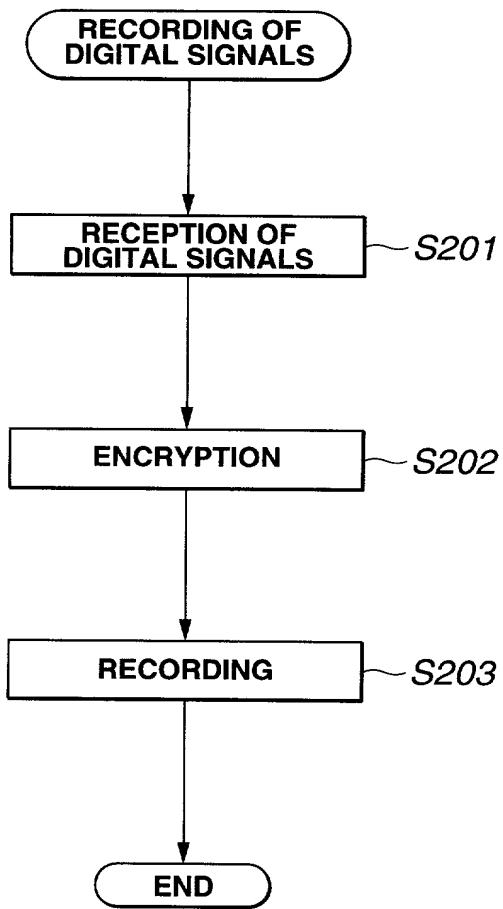


FIG.2A

FIG.2B

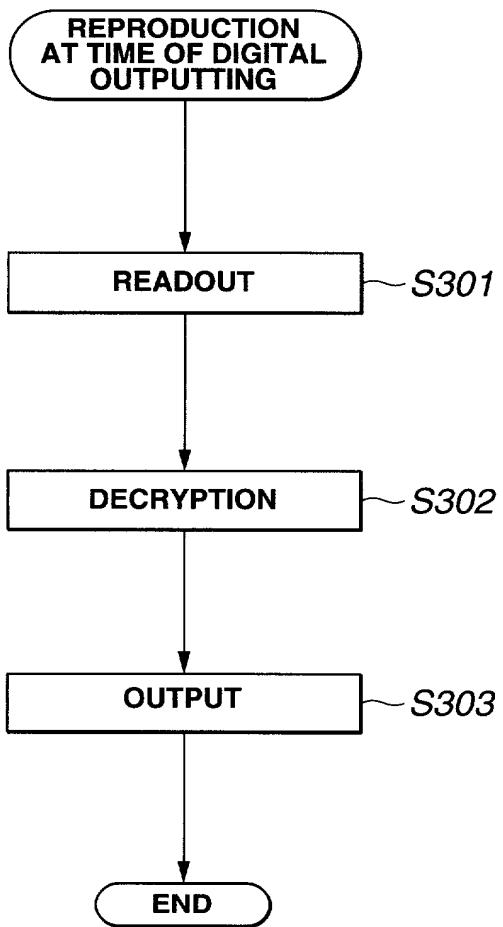


FIG.3A

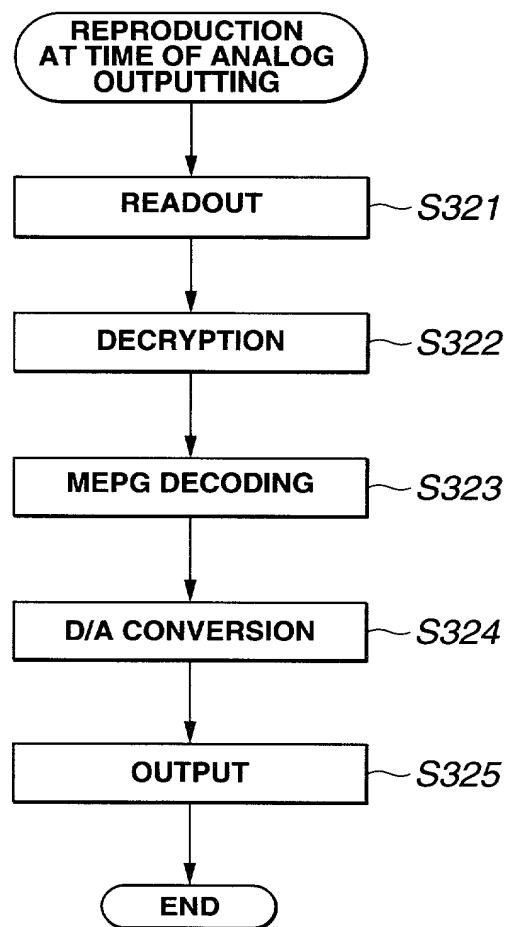


FIG.3B

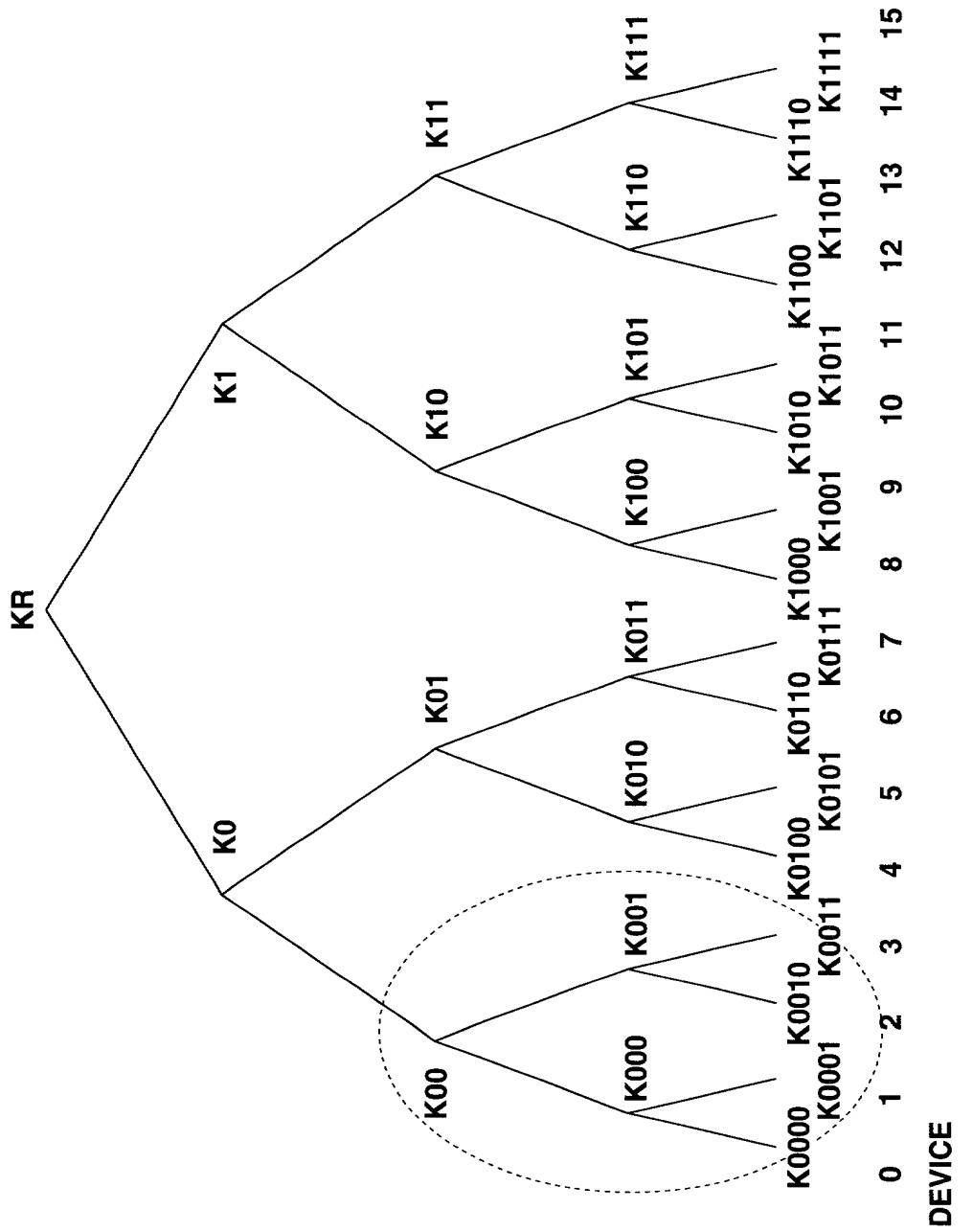


FIG.4

5/27

**KRB : Key Renewal Block INSTANCE 1**  
**SEND ROOT KEY K(t)R AT TIME t TO DEVICES 0, 1, 2**

<b>GENERATION : t</b>	
<b>INDEX</b>	<b>ENCRYPTED KEY</b>
0	Enc(K(t)0, K(t)R)
00	Enc(K(t)00, K(t)0)
000	Enc(K000, K(t)00)
001	Enc(K(t)001, K(t)00)
0010	Enc(K0010, K(t)001)

## **FIG.5A**

**KRB : Key Renewal Block INSTANCE 2**  
**SEND ROOT KEY K(t)R AT TIME t TO DEVICES 0, 1, 2**

<b>GENERATION : t</b>	
<b>INDEX</b>	<b>ENCRYPTED KEY</b>
000	Enc(K000, K(t)00)
001	Enc(K(t)001, K(t)00)
0010	Enc(K0010, K(t)001)

## **FIG.5B**

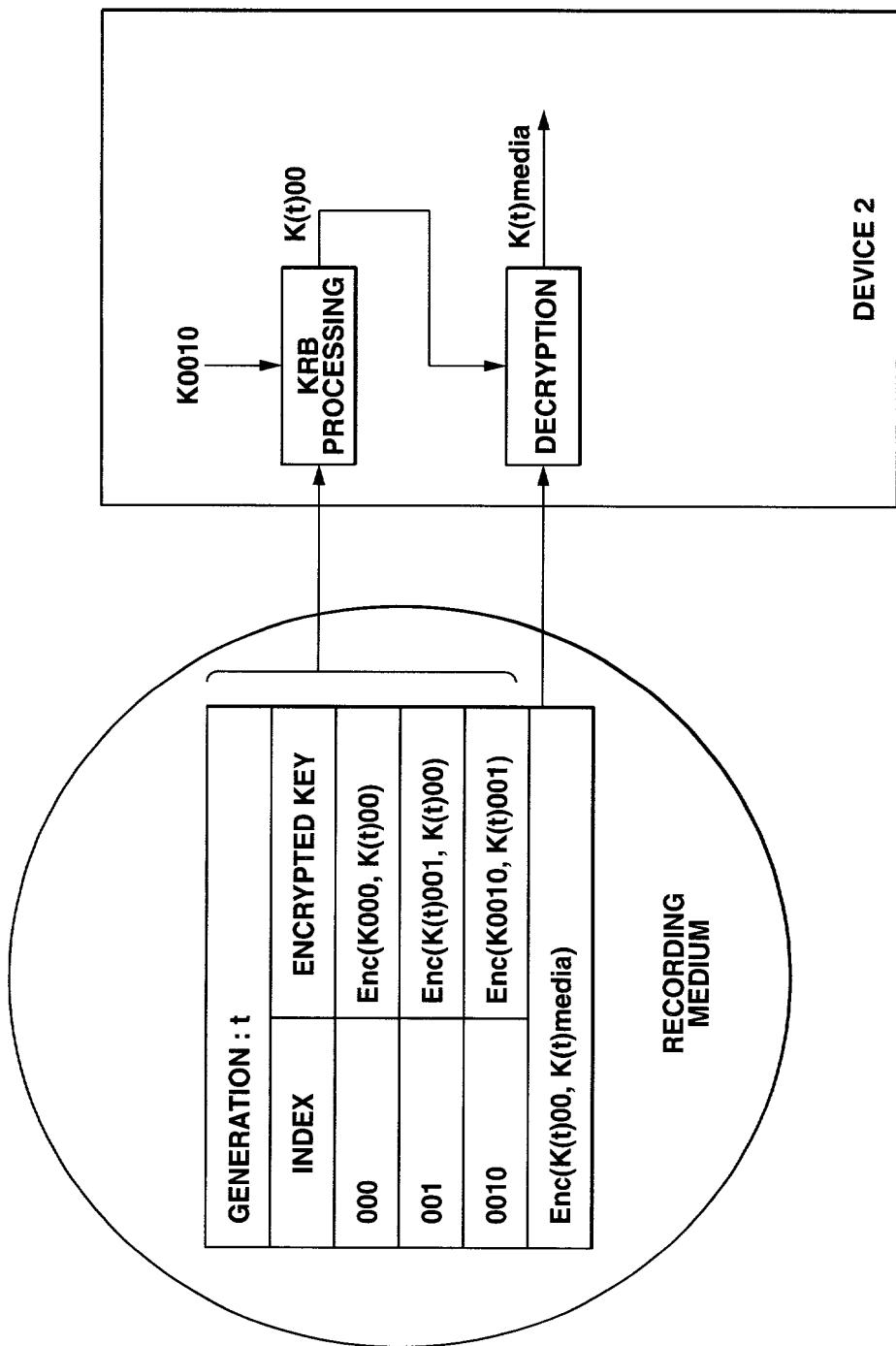


FIG.6

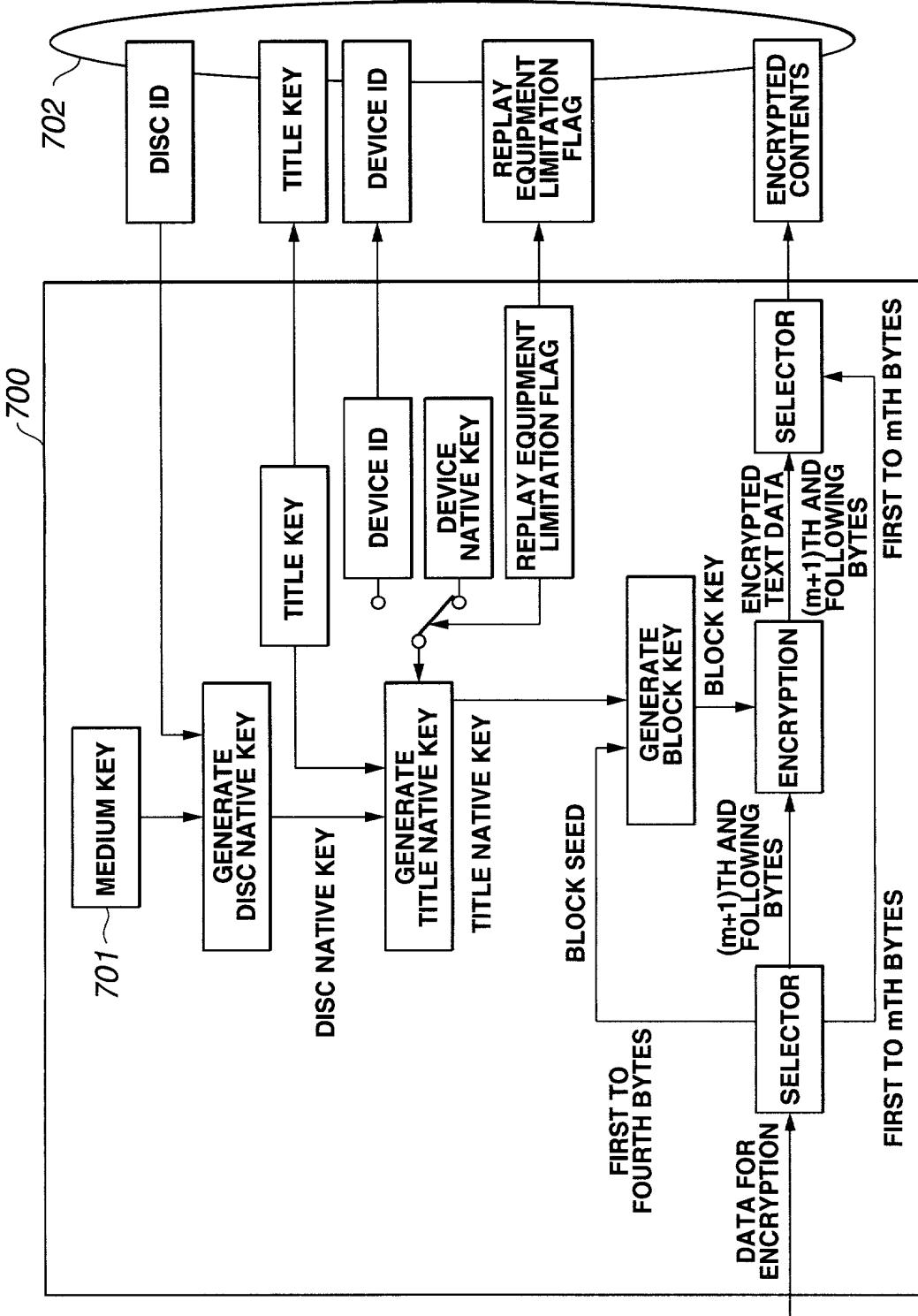
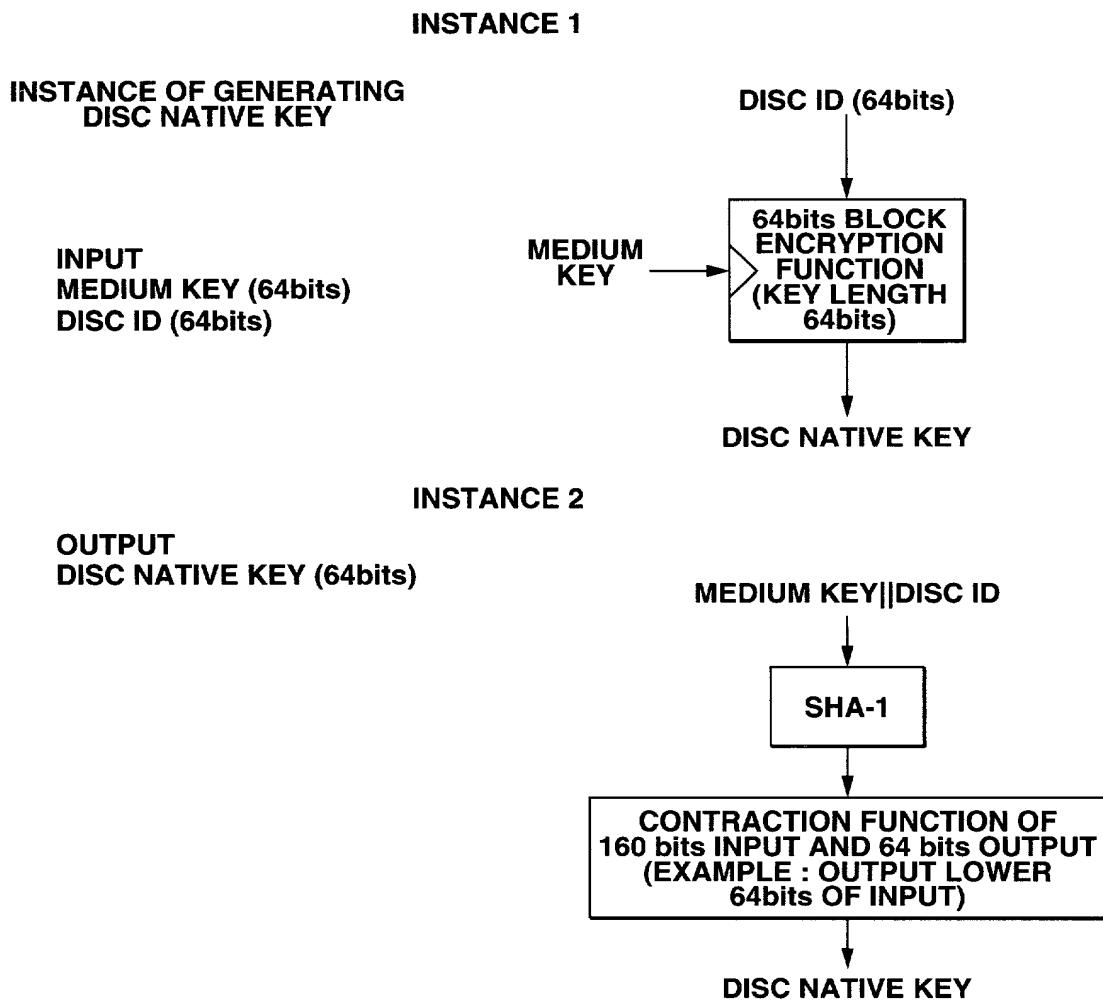
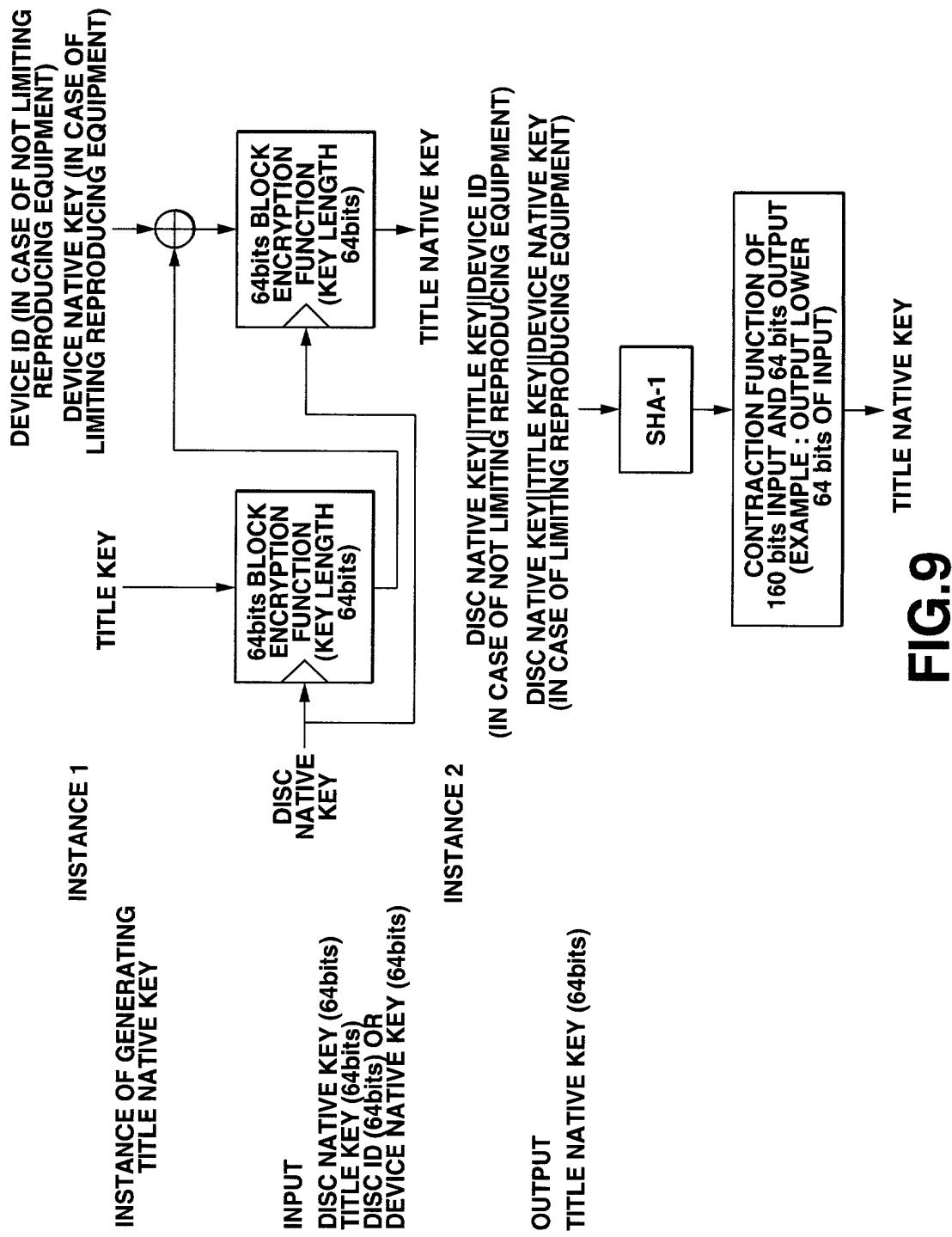
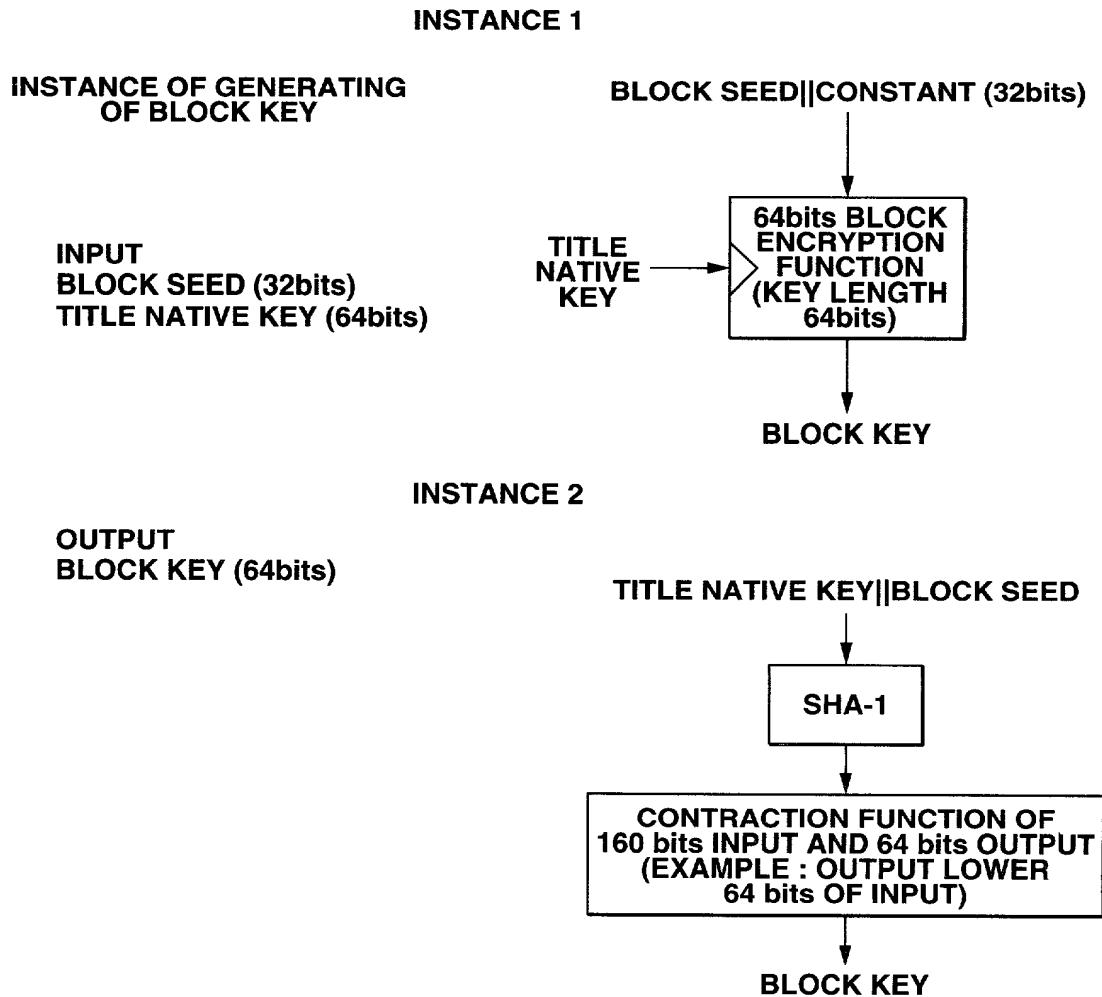


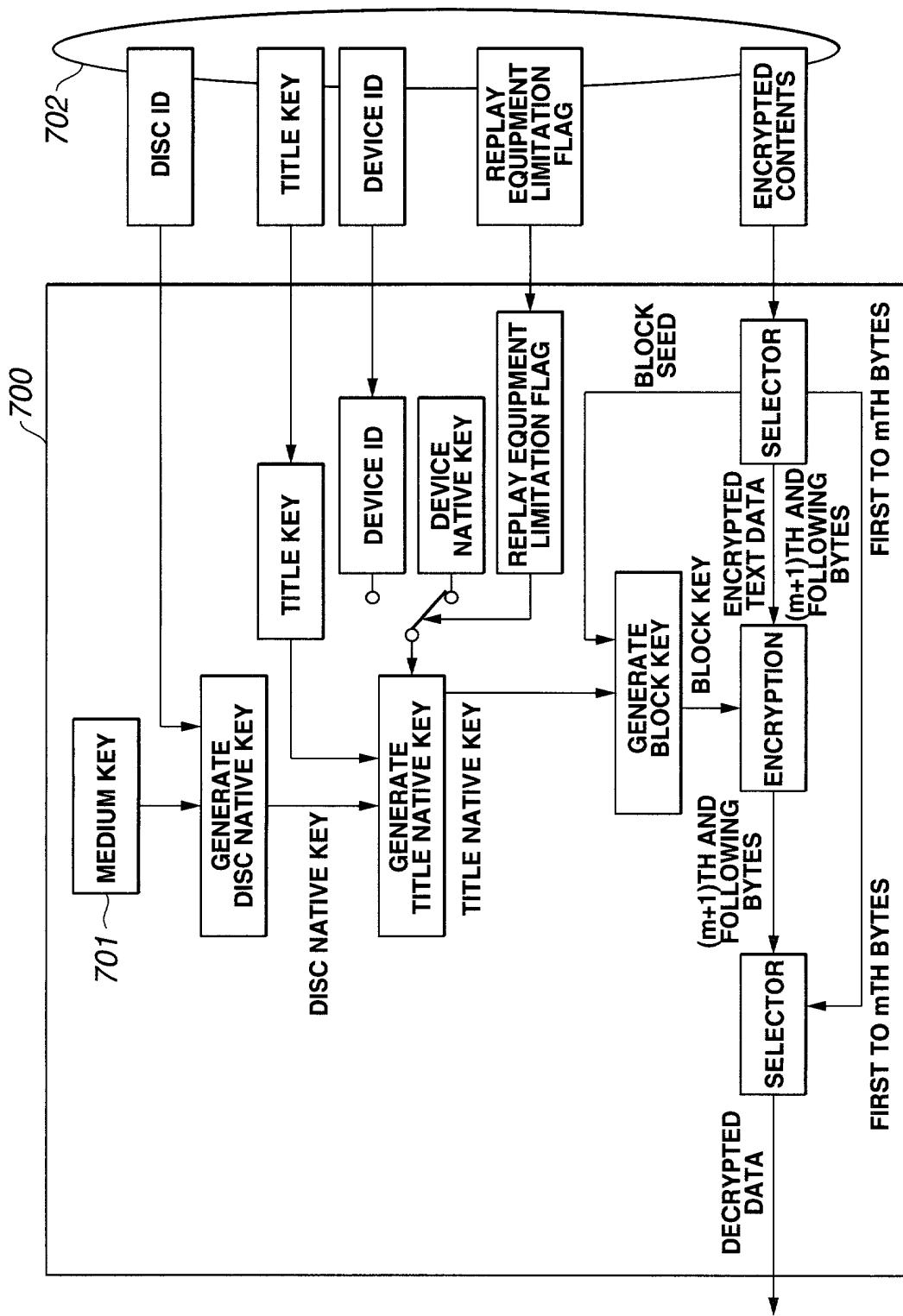
FIG.7

**FIG.8**

**FIG.9**

10/27

**FIG.10**

**FIG. 11**

12/27

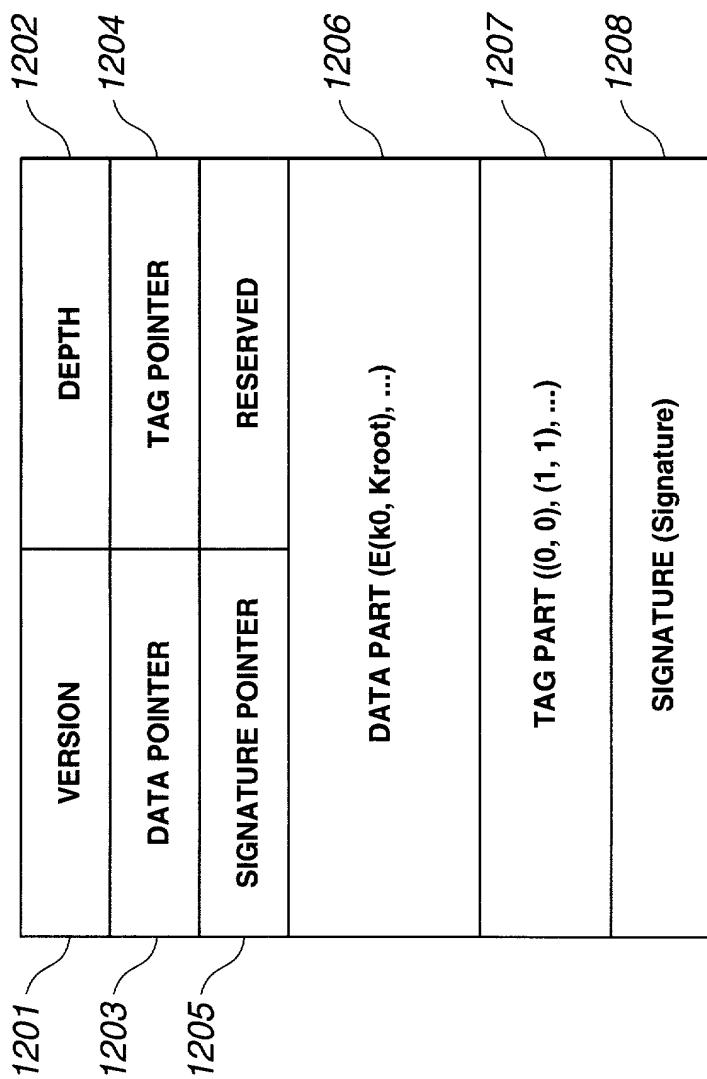
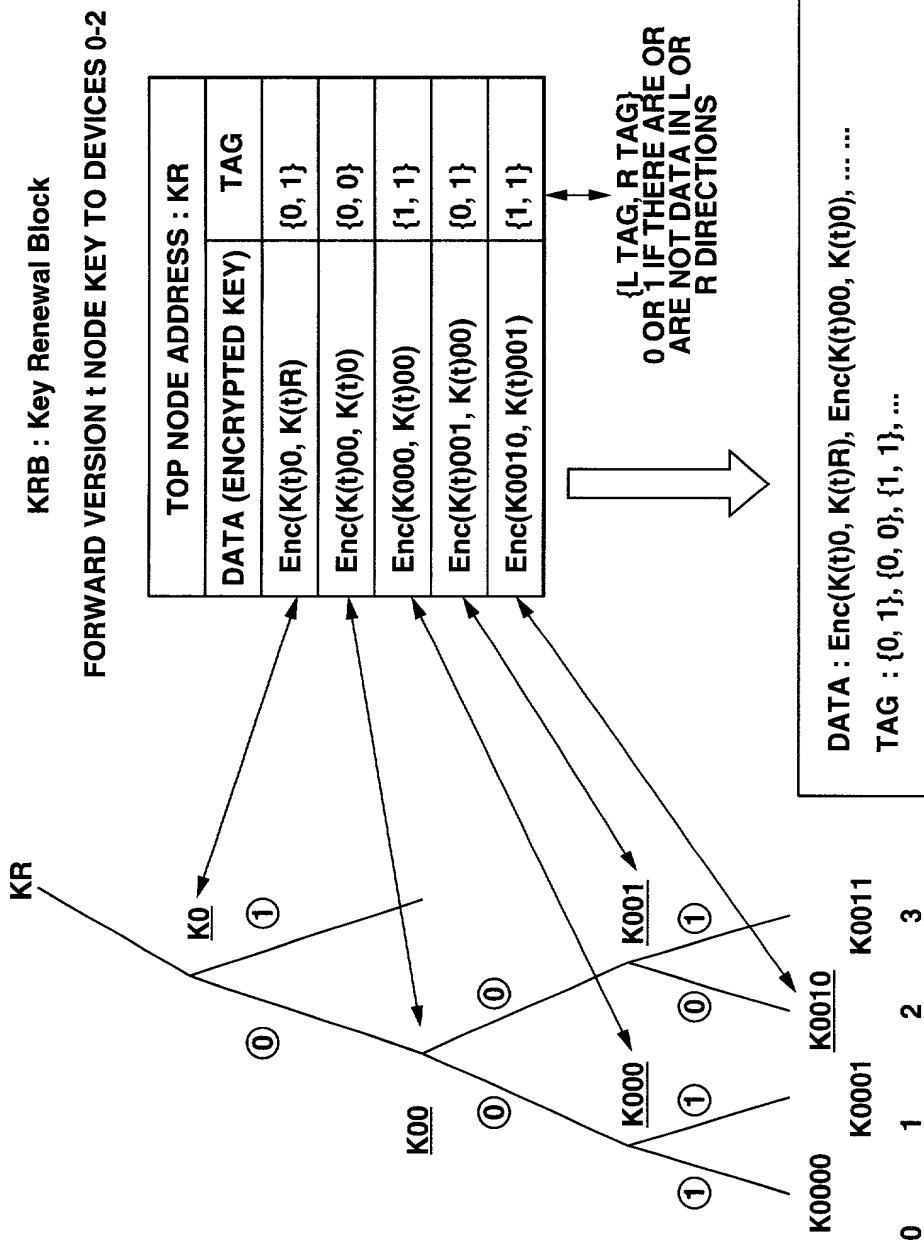


FIG. 12



14/27

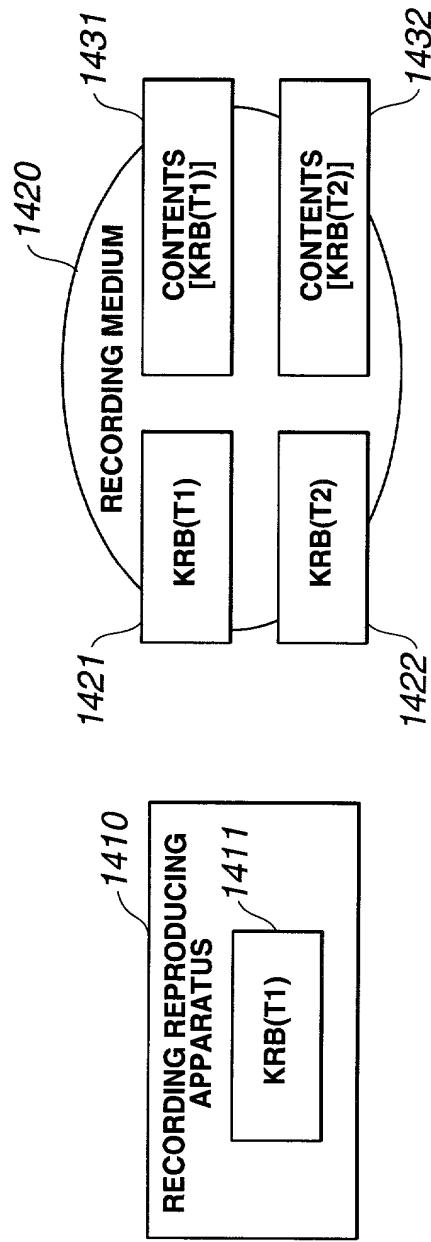


FIG. 14A

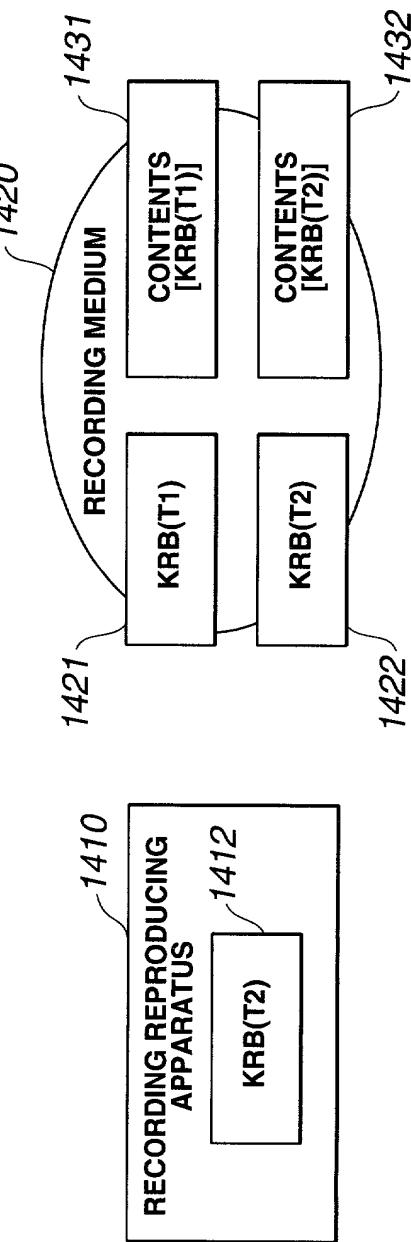


FIG. 14B

15/27

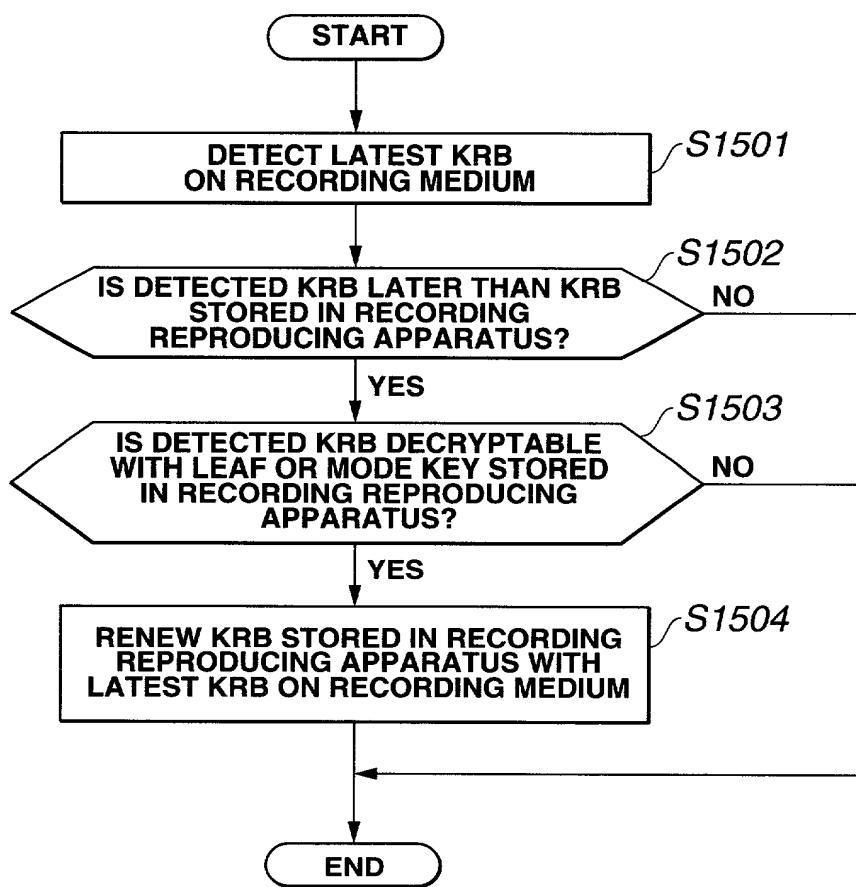


FIG.15

16/27

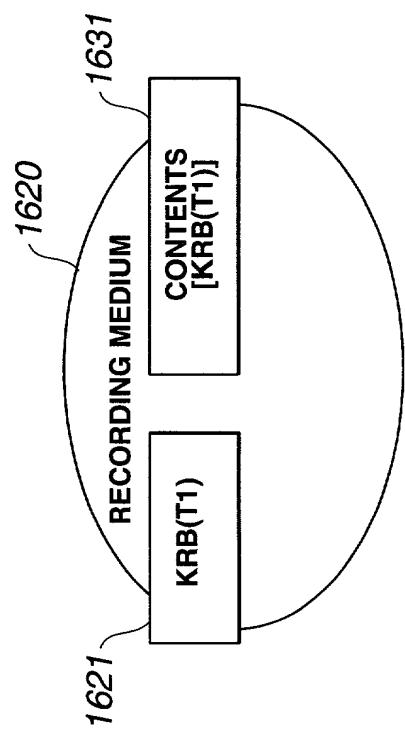


FIG. 16A

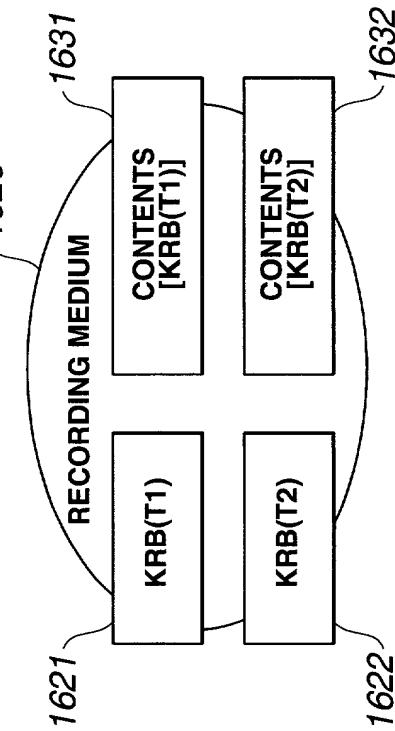
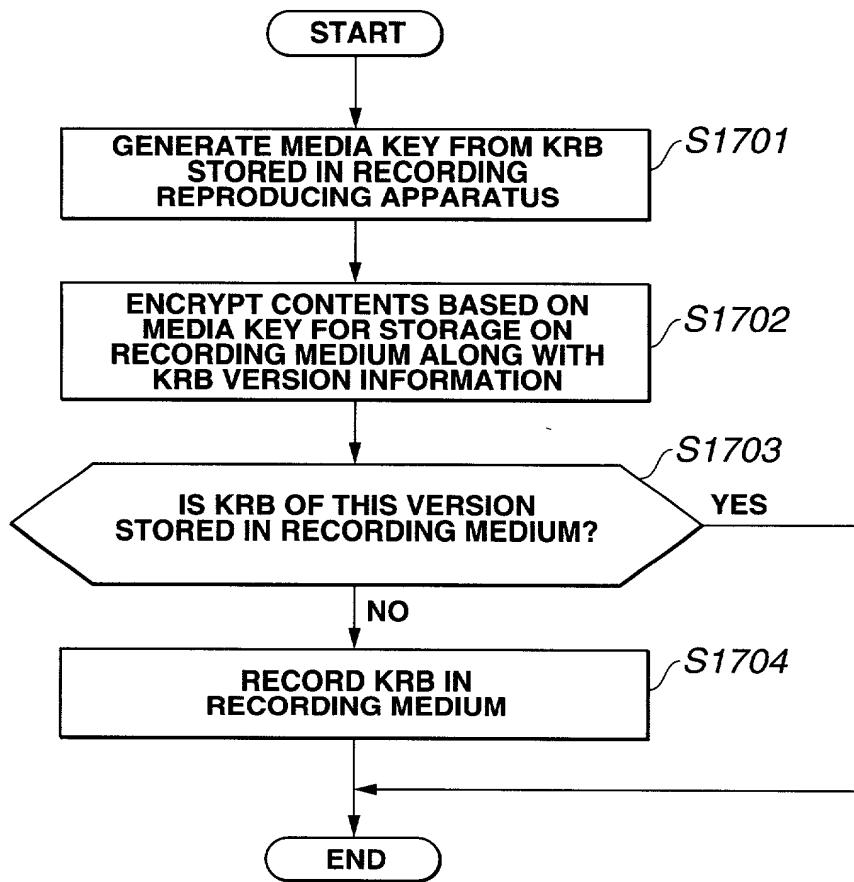
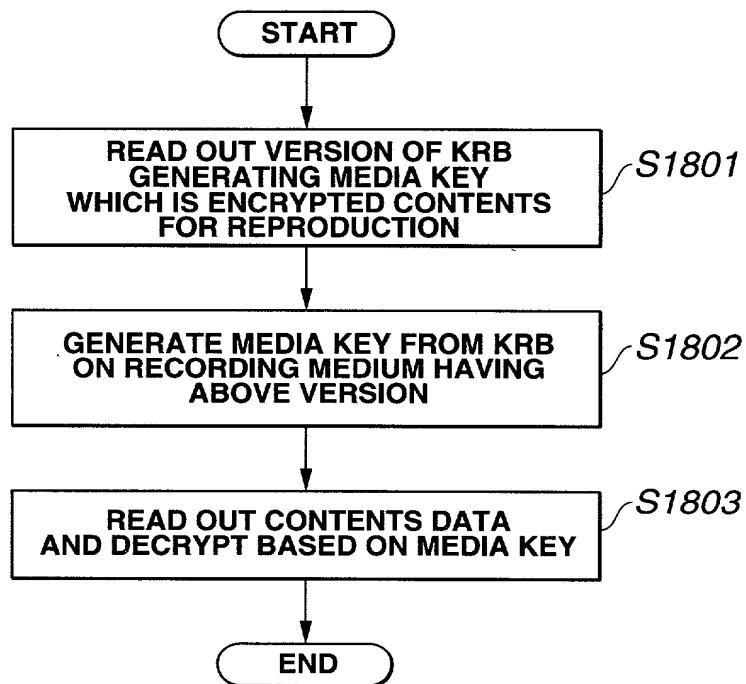


FIG. 16B

17/27

**FIG.17**

18/27

**FIG.18**

19/27

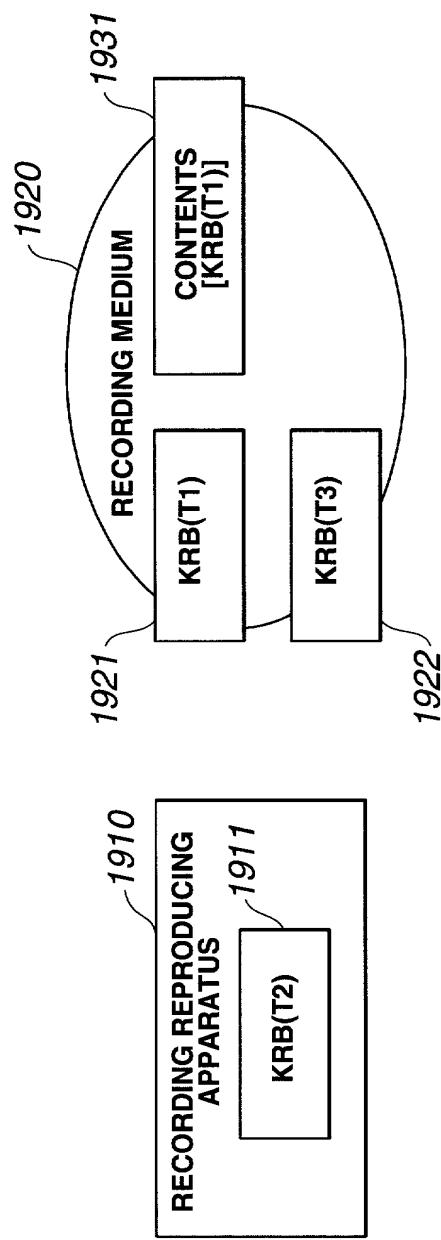


FIG. 19A

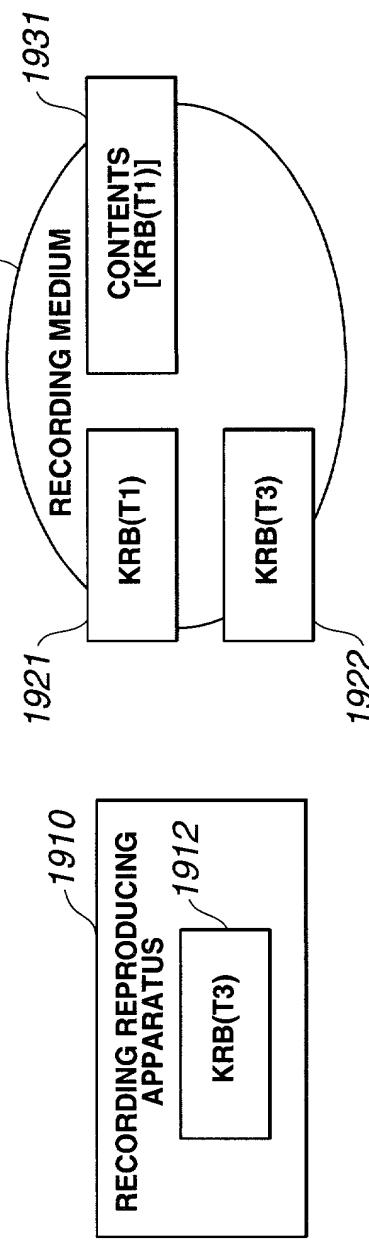


FIG. 19B

20/27

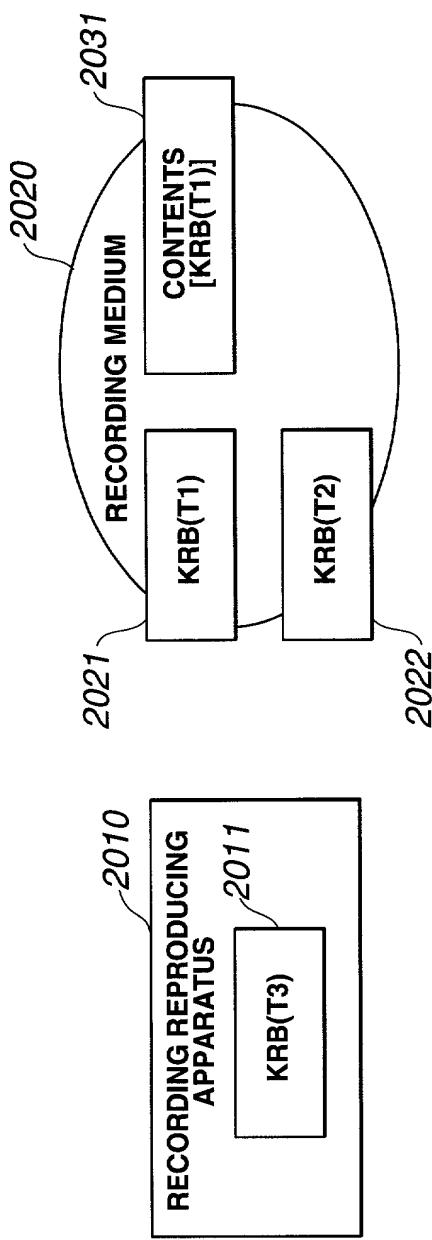


FIG.20A

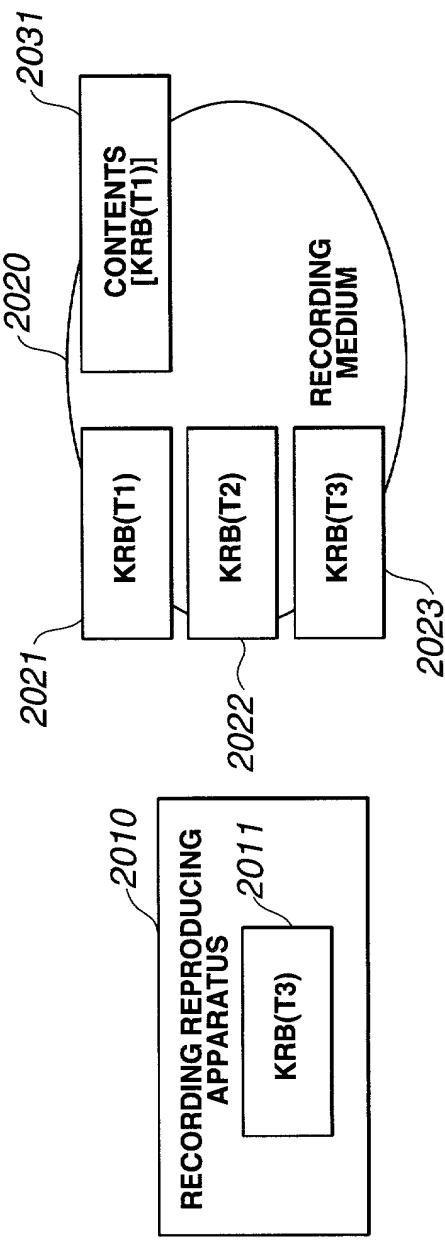


FIG.20B

21/27

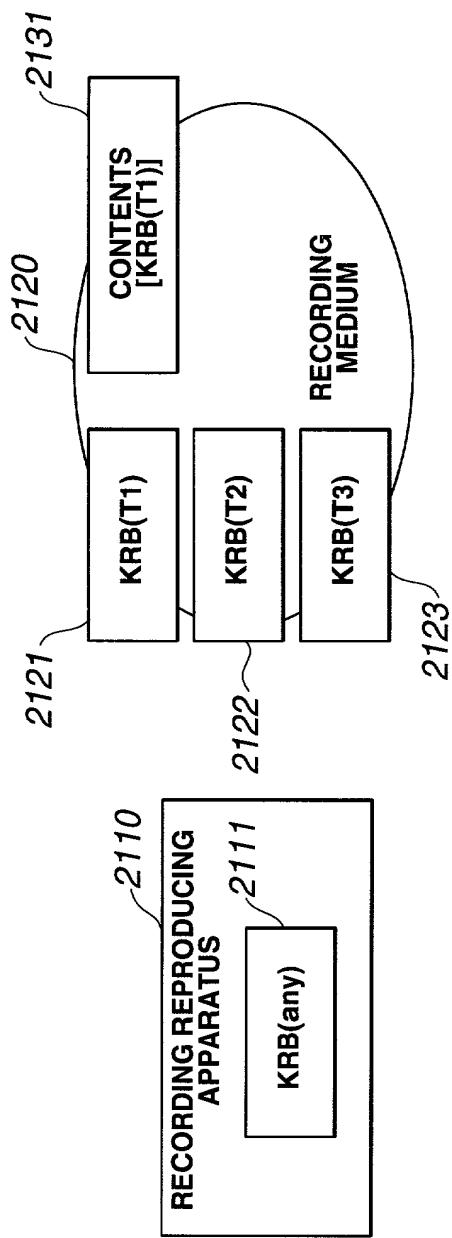


FIG. 21A

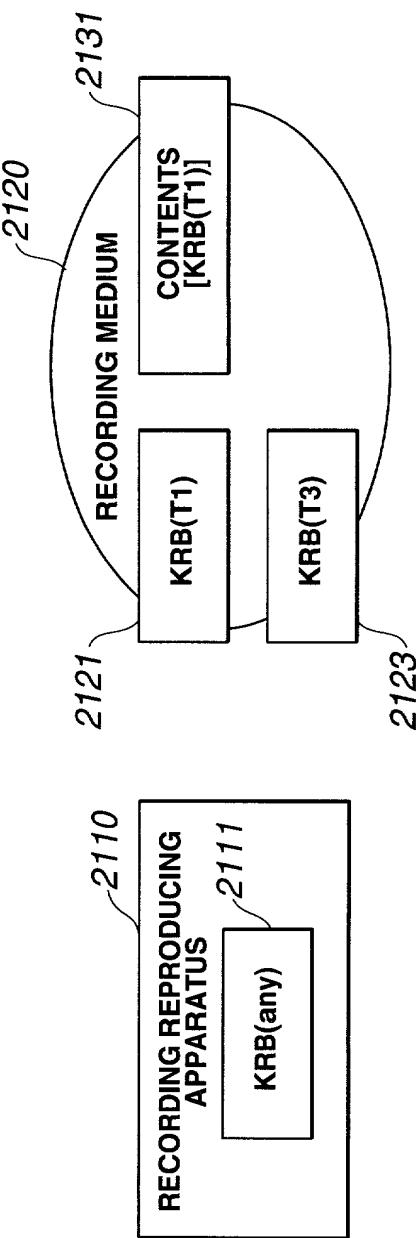


FIG. 21B

22/27

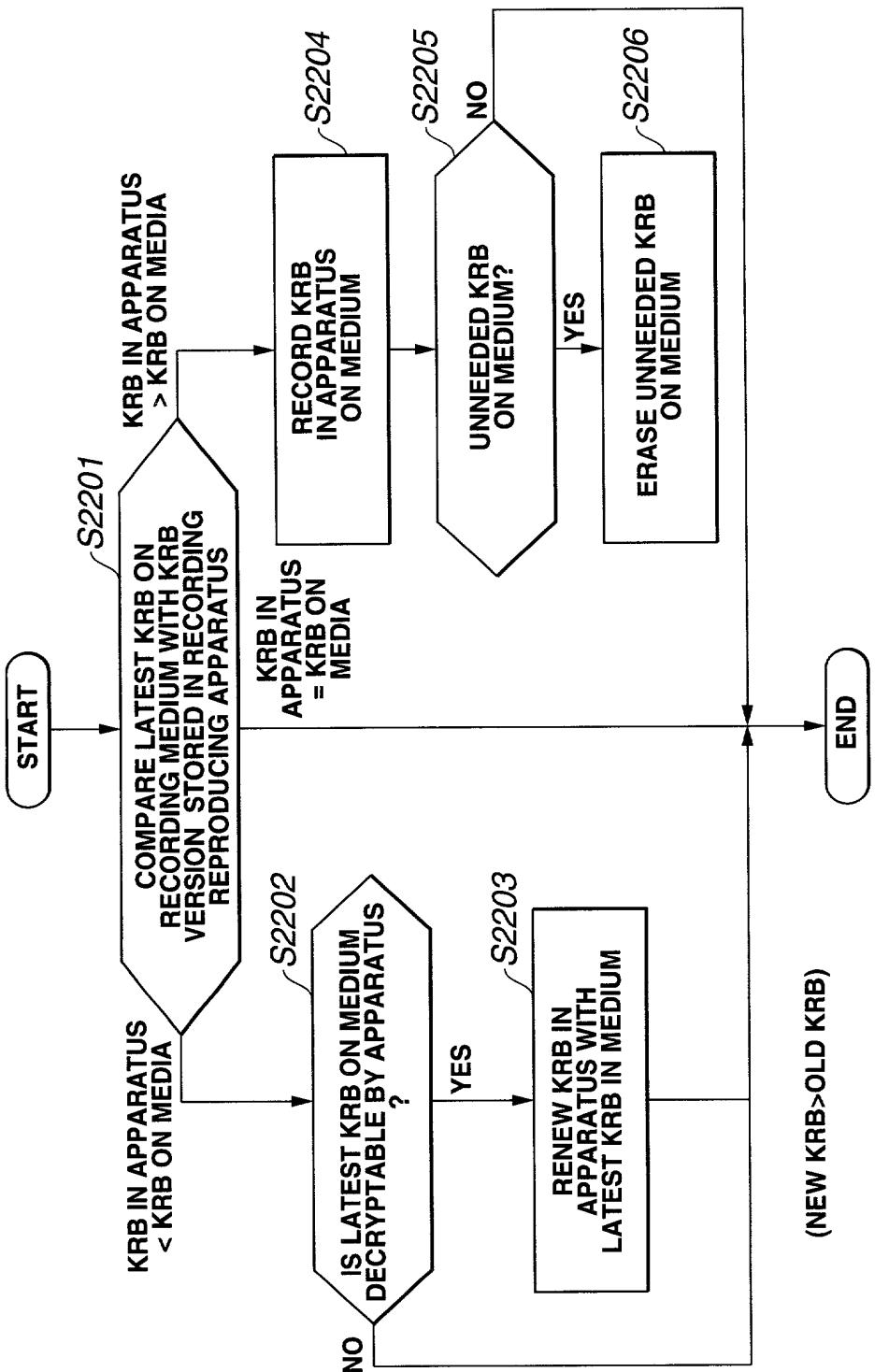
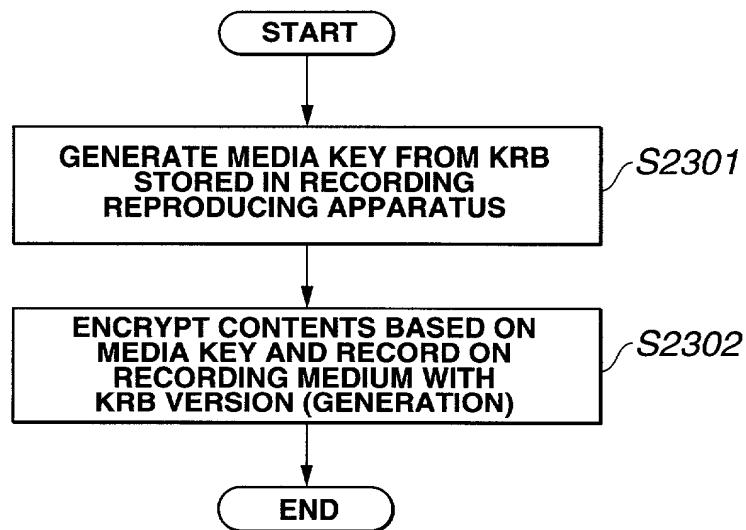
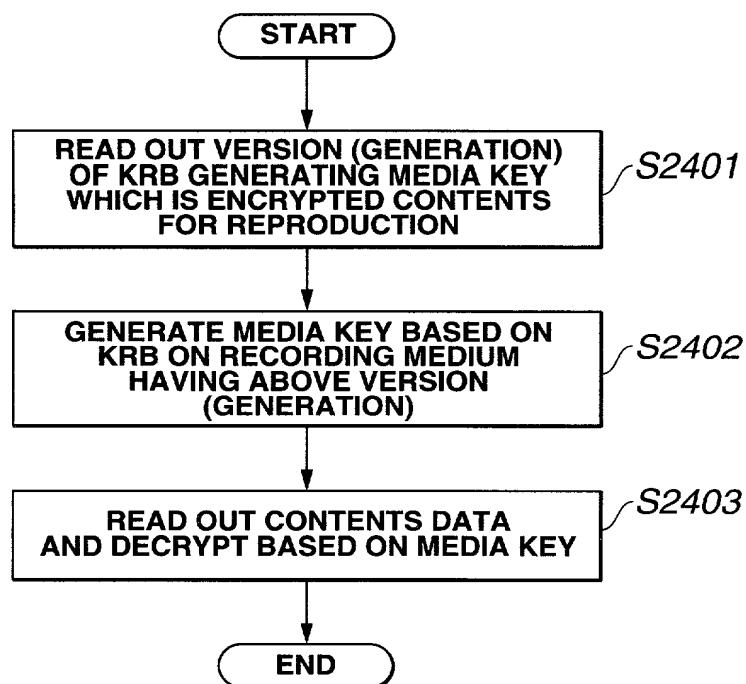


FIG.22

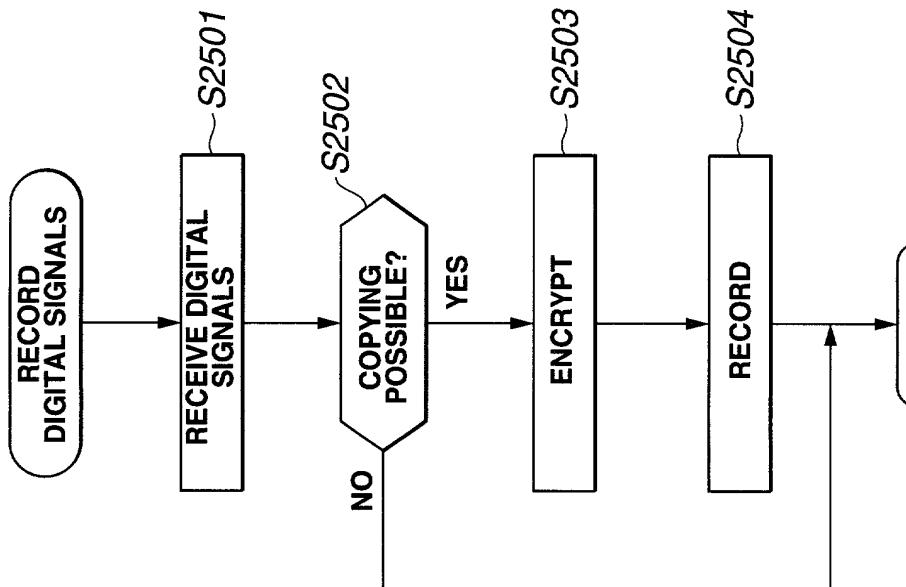
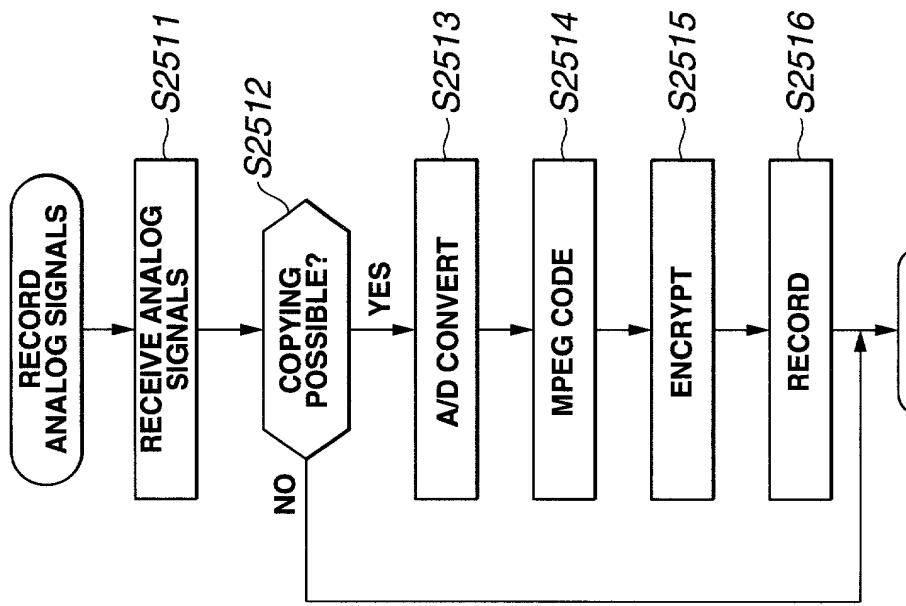
23/27

**FIG.23**

24/27

**FIG.24**

25/27

**FIG.25A****FIG.25B**

26/27

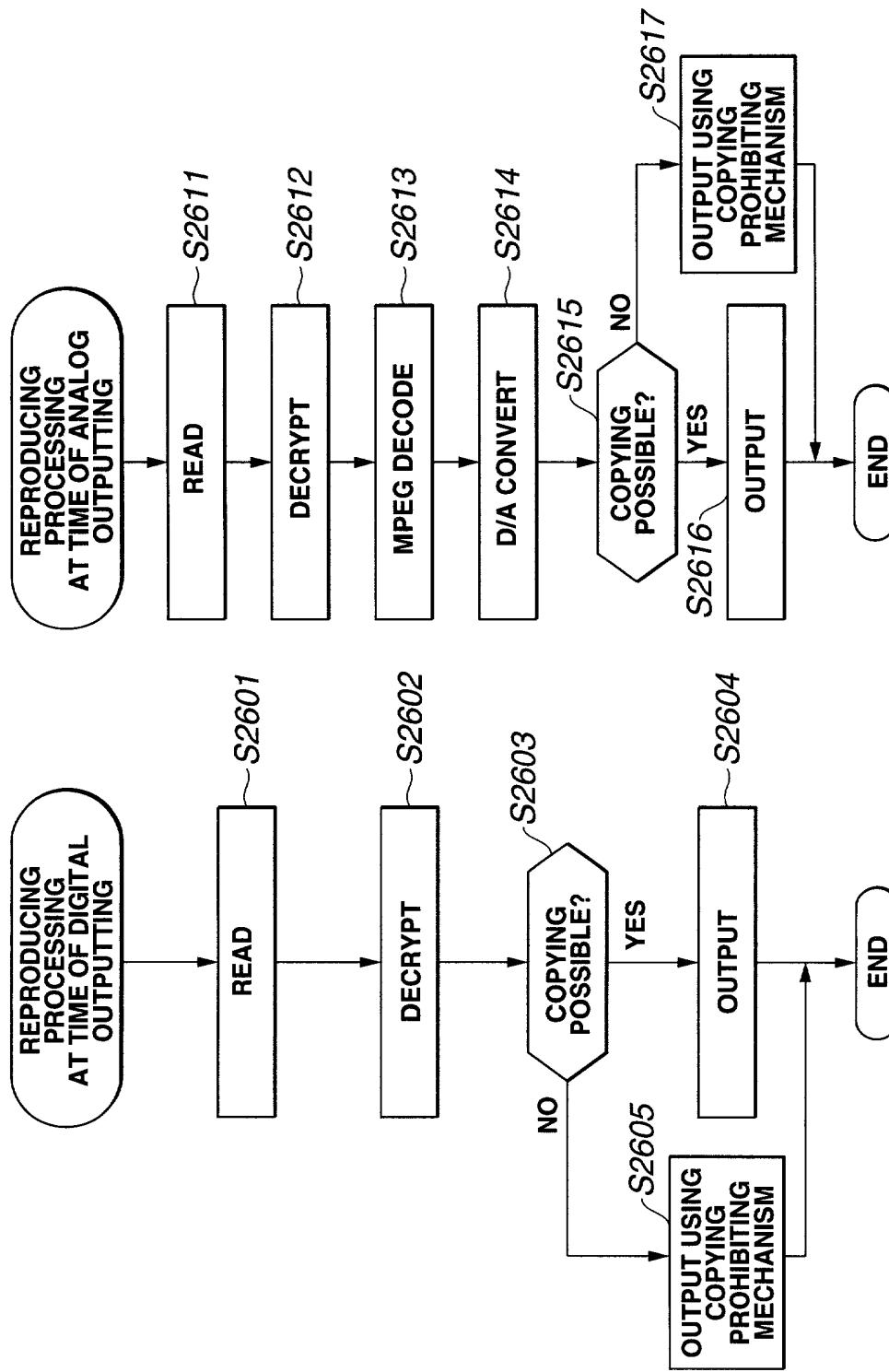


FIG.26B

FIG.26A

27/27

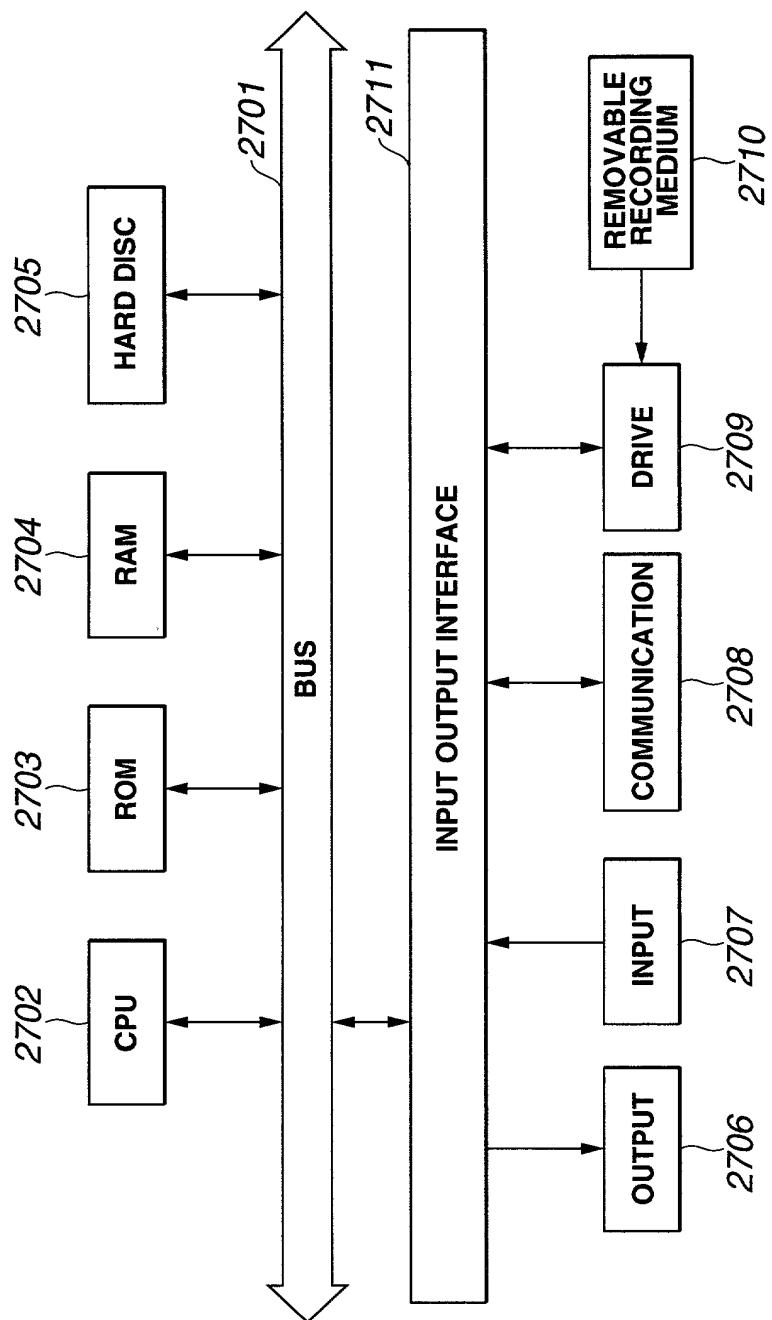


FIG.27